

Hab. Male, Watan, Bhamo District, 3rd April; female (with blue tail-feather), Sinlum-kaba, Bhamo District, 27th April; second female, Mongwai, Bhamo District, 12th April.

I propose calling this beautiful bird after Sir Herbert Thirkell White, Lieutenant-Governor of Burma.

Urocichla kauriensis, sp. n.

Adult male. Very like *U. reptata* (Bingham), but the chest and sides of the breast are of a more rufous-brown, and the middle of breast and belly is distinctly spotted with white.

Total length about 3·7 inches; culmen 0·5; wing 1·8; tail 1·2; tarsus 0·75.

Iris dark red; bill dark horn-colour; legs light brown.

Adult female. Similar to the male, but with the wings less rufous and of a more olive-brown.

Hab. Watan, Bhamo District, Upper Burma.

The above-mentioned specimens were a pair and were shot whilst building their nest.

Urocichla sinlumensis, sp. n.

Adult male. Easily distinguishable from *U. reptata*, Bingham, and the above species (*U. kauriensis*) by having the chin and throat mostly white, slightly mottled with brownish; the feathers of chest, sides of the breast, and flanks of a more olive colour, conspicuously spotted with white and tipped with black.

Total length about 4·1 inches; culmen 0·45; wing 1·9; tail 1·9; tarsus 0·75.

Iris reddish-brown; bill black; legs brownish.

Hab. Sinlum-kaba, Bhamo District, Upper Burma.

Fairly plentiful in the dense undergrowth near water.

XXIX.—Notes on the Forficularia.—XIII. *A Revision of the Brachylabidæ (Isolabidæ).* By MALCOLM BURR, B.A., F.E.S., F.L.S., F.Z.S., F.G.S.

DOHRN (Stett. ent. Zeit. xxv. p. 292, 1864) proposed this genus for the following species:—*mauritanica*, Lucas; *maritima*, Bon.; *angulifera*, Gerst.; *chilensis*, Blanch.; and *modesta*, Généc—distinguishing it from *Forcinella* (= *Anisoblabis*) by the presence of lateral tubercles on the second and

third abdominal segments. This character is insufficient to justify the separation of a genus, and accordingly Scudder (Proc. Bost. Soc. N. H. xviii. p. 290, 1876) sank *Brachylabis*, as *maritima* is the type of *Forcinella* (= *Anisolabis*), from which *mauritanica* cannot be generically separated. But Scudder had not seen *chilensis*, Blanch., or he would have at once recognized its difference from *maritima*, though he knew and described under the genus *Cylindrogaster* the species *nigra*, which is now known to be a true *Brachylabis*. In 1883 de Bormans (Ann. Soc. ent. Belg. xxvii. p. 64) separated *Brachylabis*, Dohrn, for *chilensis*, which he made the type, and *punctata*, Dubr. Verhoeff did not know any of the six described species of *Brachylabis* when he erected his family Isolabidæ for his three genera *Isolabis*, *Otenisolabis*, and *Leptisolabis*, all from the Ethiopian Region (SB. Ges. naturf. Fr. Berlin, 1901, no. 1, p. 10); but three years later (Arch. f. Naturg. 1904, Bd. i. p. 119) he noted the resemblance between the Isolabidæ and *Brachylabis*, though he had not seen a single specimen of the latter. He doubted the inclusion of *B. chilensis* in the Isolabidæ, but suggested that *B. bifoveolata* was a true Isolabid.

A comparison of the generic characters shows that the two genera are evidently allied, and a glance at the types in Berlin removed all remaining doubt.

It now became necessary to examine the different species of *Brachylabis* to see if it were possible to reorganize the system and allocate the various species to the different genera.

Fortunately I possess in my collection the following species:—*chilensis*, Blanch., *nigra*, Scudder, *malgacha*, Burr, *punctata*, Dubr., from Java, as well as *punctata*, Bormans, from Burmah, which is a distinct form.

By using Verhoeff's arrangement of the Isolabidæ, it was possible to allocate all these species to what appears to be their true position; thus the riddle of the Isolabidæ, which has puzzled dermopterists since 1902, is solved.

Table of Subfamilies and Genera.

1. Segmentum ultimum dorsale ♂ margine postico medio exciso, utrinque lobulo triangulari instructum; corpus fere cylindricum.....
2. Mesonotum elytris rudimentariis instructum.....
- 2.2. Mesonotum elytris rudimentariis nullis.
3. Mesonotum lateribus carinatis.....
- 3.3. Mesonotum lateribus integris, interdum tumido-elevatis.

BRACHYLABINÆ.

1. *Verhoeffia*, g. n.
2. *Brachylabis*, Dohrn
[(= *Otenisolabis*, Verh.).

- | | |
|---|---------------------------------|
| 4. Antennarum segmento 3 elongato,
duplo longiori quam latiori | 3. <i>Isolabis</i> , Verh. |
| 4.4. Antennarum segmento 3 globulari. | 4. <i>Leptisolabis</i> , Verh. |
| 1.1. Segmentum ultimum dorsale ♂ margine
postico integro, truncato; corpus plus
minus depressum | PARISOLABINÆ. |
| 2. Abdomen ♂ ♀ fortius dilatatum; seg-
mentum ultimum dorsale ♂ ♀ valde
angustatum. | 5. <i>Parisolabis</i> , Verh. |
| 2.2. Abdomen ♂ vix dilatatum; segmen-
tum ultimum dorsale ♂ haud angus-
tatum, transversum | 6. <i>Pseudisolabis</i> , g. n. |

Subfamily I. BRACHYLABINÆ.

The genus *Isolabis*, Verh., falling into the same subfamily as *Brachylabis*, Dohrn, it is necessary to suppress the name *Isolabinæ* for the subfamily and to substitute that of *Brachylabinæ*.

In the cylindrical form of the body, the few antennal segments, the triangular head, large eyes, attenuated abdomen, excised last dorsal segment, and tapering, slender, arched forceps, it is very well characterized. All the members have a very distinctive appearance and cannot be confused with any other group.

Genus I. VERHOEFFIA, nov.

Antennæ segmento 3 longo, saltem duplo longiori quam latiori, 4 longiori quam latiori, 5 tertium longitudine subæquantî; mesonotum lateribus haud carinatis, ad humeros ipsos obtuse tumido-elevatis, elytris rudimentariis instructum, cæteris cum generibus *Isolabide* et *Brachylabide* congruet.

As Verhoeff, in characterizing the *Isolabidæ*, says "Elytra und Flügel fehlen vollig," I erect this new genus for *Brachylabis sjöstedti*, Borg (Ark. f. Zool. i. p. 568, Taf. xxvi. fig. 2, 1904), from the Cameroons. Borg gives a good figure, and the rudimentary elytra are plainly shown like a Y-shaped suture on the mesonotum. Their form somewhat recalls that of the same organs in *Karschiella*, in which the chief sign of elytra is a narrow excision in the posterior border of the mesonotum. My friend Dr. Borelli, of Turin, has sent me a specimen from Fernando Po, and I have in my own collection one labelled "Cameroon."

Genus II. BRACHYLABIS, Dohrn (sensu stricto).

Brachylabis, Dohrn (part.), Stett. ent. Zeit. xxv. p. 292 (1864); Born. Ann. Soc. ent. Belg. xxvii. p. 64 (1883); Kirby, Journ. Linn. Soc., Zool. xxiii. p. 518 (1891); id. Cat. Orth. i. p. 16 (1904).
Ctenisolabis, Verhoeff, SB. Ges. nat. Fr. Berlin, 1902, p. 11.

Mesonotum with distinct sharp lateral keel on each side. Third antennal segment a little longer than broad.

The above characters, by which Verhoeff distinguishes his genus *Ctenisolabis*, for the single species *Ct. togoensis*, are common to *B. chilensis*, Blanch., which is the type of *Brachylabis*. Consequently the former genus falls as a synonym.

Brachylabis in its true sense also includes *B. nigra*, Scudd., *B. malgacha*, Borm., *B. caudelli*, sp. n. (*vide infra*), *B. bifoveolata*, Bol., and *B. voeltzkowi*, sp. n. (*vide infra*).

1. Pronotum longius quam latius. (Antennarum segmentum 3 quam 2 duplo longius.)
2. Mesonotum carinis obtusis usque ad marginem posticum productis; (pedibus infuscatis: species madecassa) 1. *malgacha*, Burr.
- 2.2. Mesonotum carinis acutis ante marginem posticum evanescentibus.
3. Statura gracili; genubus flavis: species madecassa 2. *voeltzkowi*, sp. n.
- 3.3. Statura fortiori; genubus infuscatis: species americana meridionalis 3. *chilensis*, Blanch.
- 1.1. Pronotum vix longius quam latius.
2. Antennarum segmentum 3 vix longius quam latius.
3. Frons punctis impressis postice confluentibus: species africana 4. *togoensis*, Verh.
- 3.3. Frons punctis impressis haud confluentibus: species peruviana 5. *nigra*, Scudd.
- 2.2. Antennarum segmentum 3 duplo longius quam latius: species asiatica.
3. Pedibus unicoloribus; abdomen segmentum 4 pliciferum 6. *bifoveolata*, Bol.
- 3.3. Pedibus fulvo-annulatis; abdomen segmentis 3 et 4 pliciferis 7. *caudelli*, sp. n.

1. *Brachylabis malgacha*, Burr.

Brachylabis malgacha, Burr, Trans. Ent. Soc. London, 1904, p. 292.

This species has a distinctive appearance; the feet are slenderer and longer than in the other species, the antennæ are not so thick, and the keel of the mesonotum is more obtuse. It is recorded from Madagascar and Diego Suarez.

2. *Brachylabis voeltzkowi*, sp. n.

Statura minori, graciliori; antennæ 15 segmentis, apice fulvo-annulatæ; pronotum valde longius quam latius; mesonotum carinis acutis, paullo ante marginem posticum evanescentibus; femora tibiæque fusca, apice fulvo-annulata. ♂.

♂.

Long. corporis 11 mm.
 ,, forcipis 1 ,,

Stature small and rather slender. Antennæ with 15 segments: the twelfth is yellow in the type specimen, the rest black; the third segment is quite twice as long as broad, the fourth shorter: the head is small and quite typical.

Pronotum about $1\frac{1}{2}$ times as long as broad, slightly broader posteriorly than anteriorly; median suture almost obsolete.

Mesonotum with lateral keels sharp, gently curved, obsolete just before reaching the posterior margin.

Metanotum strongly sinuate posteriorly. Femora and tibiæ black, each with a yellow ring at the apex.

Abdomen slender, with distinct lateral tubercle on the fourth segment only; last dorsal segment typical, excavate, and attenuate.

Forceps with branches remote at the base, cylindrical, gently incurved, and crossing at the apex.

Nossi-Bé (*Voeltzkow*).

The single male specimen which is my type is out of de Bormans's collection, and was labelled by him "*Brachylabis punctata*, Dubr." It differs, of course, from the true *punctata* in the generic characters, but has a strong resemblance to *Br. caudelli* from Burmah, which de Bormans confused with *B. punctata*. It differs from *B. caudelli* in the longer and narrower pronotum and in the evanescence of the mesothoracic keels.

3. *Brachylabis chilensis*, Blanch.

The literature of this species is quoted by de Bormans and Kirby. It is the largest of the genus and quite different in appearance from *B. nigra*, the only other known American species. It occurs in Chili, Ecuador, and Brazil, but does not seem to be common.

4. *Brachylabis togoensis*, Verh.

Ctenisolabis togoensis, Verh. SB. Ges. nat. Fr. Berlin, 1902, p. 14.

This species is only known to me by Verhoeff's description and a sketch of the type. It is one of the smaller species and appears to be allied to *B. nigra*.

5. *Brachylabis nigra*, Scudd.

Originally described as a *Cylindrogaster*, this is a true *Brachylabis*. It is easy to recognize, as it is stouter and smaller than the only other known American species, *B. chilensis*, and has a characteristic greenish sheen; but this is not always preserved in cabinet specimens.

It occurs in northern South America.

6. *Brachylabis bifoveolata*, Bol.

Brachylabis bifoveolata, Bol. Ann. Soc. Ent. Fr. 1897, p. 285, pl. x. fig. 1.

Bolivar's description is brief but good, and so is his figure. It differs from *B. caudelli*, the other Asiatic species, in its uniform reddish legs, in the more strongly convergent keels of the mesonotum, and in the absence of the glandular folds in the third abdominal segment.

7. *Brachylabis caudelli*, sp. n.

Antennæ nigrae, ante apicem pallido-annulatae, segmento 3 duplo longius quam latius, 5 quam 3 aequè longo, fere cylindricis; pronotum subquadratum, haud vel vix longius quam latius; mesonotum carinis acutis leviter arcuatis; femora basi nigra, apice pallida; tibiae fuscae, apice pallidiores; forcipis brachia ♂ basi haud contigua. ♂ ♀.

	♂.	♀.
Long. corporis	11 mm.	12 mm.
„ forcipis	1.5 „	1 „

Small; colour, texture, form, and pubescence typical; antennæ with 15 segments, with a pale ring before the apex; segments rather long, third is about twice as long as broad, fourth more than half as long as third, fifth quite as long as third, if not a trifle longer; body almost cylindrical; mesonotum with the keels gently bowed at the shoulder and gently converging posteriorly; femora black, yellow at the apex; tibiae brownish yellow, paler towards the apex; tarsi paler; abdomen typical, third and fourth segments with strong lateral tubercles; forceps stout at the base, not contiguous in the male, contiguous in the female, rapidly tapering, gently arched.

Burma, Tenasserim, and Pegu (*Borm.*).

Apparently common in Further India. This species was confused by de Bormans with *B. punctata*, which is now proved to be generically distinct; but there is, of course, a strong family likeness throughout the *Brachylabidæ*. It is most like *B. voeltzkowi* in appearance.

8. ? *Brachylabis geniculata*, Montr.

Chelidura geniculata, Montrousier, Ann. Soc. L. Lyon, (n. s.) xi. p. 222 (1864).

Brachylabis geniculata, Borm. Tierreich, Forf. p. 54 (1900).

Montrousier's description is insufficient, but de Bormans

gives a description, with an enquiry as to the sex. I have a coloured sketch of a female by de Bormans which shows distinct *straight* keels on the mesonotum, so it must apparently be referred to this genus. From this sketch it appears that the third antennal segment is decidedly long.

It may be provisionally ranged in *Brachylabis*.

Genus III. ISOLABIS, Verh.

Isolabis, Verhoeff, SB. Ges. naturf. Fr. Berlin, 1902, p. 14.

In this genus there are no keels on the mesonotum, though the sides are somewhat tumid; it thus differs from *Brachylabis*.

It differs from *Leptisolabis* in having the third antennal segment double as long as broad. The forceps ♂ are remote at the base.

It contains at present a single species, *I. braueri*, Verh., from Africa, which is only known to me from the description and a sketch of the type.

Genus IV. LEPTISOLABIS, Verh.

Leptisolabis, Verh. SB. Ges. naturf. Fr. Berlin, p. 12 (1902).
Brachylabis, Borm. (partim).

This genus agrees with *Isolabis* in having no keels to the mesonotum, but differs in having the third segment of the antennæ very short, only as long as broad. According to Verhoeff, the two African species have the head on a slim neck; but I consider this an individual peculiarity dependent on the position assumed by the organs on drying and analogous to, and as valueless as, the crossing of the forceps at the apex, which is as purely fortuitous as the position assumed by the antennæ or legs. The branches of the forceps are near together at the base. In all known species the antennæ are ringed with white and the femora and tibiæ with yellow.

Table of Species.

1. Pronotum parallelum	1. <i>philetas</i> , Burr.
1.1. Pronotum postice dilatatum.	
2. Pronotum anteriori margine truncato: species javana.....	2. <i>punctata</i> , Dubr.
2.2. Margo anterior pronoti in collem brevem productus: species africanæ.	
3. Metanotum paullo excavatum	3. <i>usambarana</i> , Verh.
3.3. Metanotum fortiter excavatum	4. <i>theoria</i> , Verh.

1. *Leptisolabis philetas*, Burr.

Brachylabis philetas, Burr, J. Bombay N. H. Soc. xiv. p. 322, pl. B. fig. 7 (1902).

The description and figure render this little species unmistakable; the transverse depression on the mesonotum is very characteristic.

2. *Leptisolabis punctata*, Dubr.

Brachylabis punctata, Dubr. Ann. Mus. Civ. Gen. xiv. p. 357, fig., ♀ (1879); id. Tierreich, Forf. p. 53 (1900) (partim); nec Borm. Ann. Mus. Civ. Gen. (2) vi. p. 436 (1888) & *loc. cit.* xvi. p. 379 (1894).

If we exclude the Burmese specimen taken by Fea, de Bormans's remarks and notes apply to this species. It is quite different from *B. philetas*, but it is impossible to discriminate it accurately from the African species of Verhoeff without a comparison of authentic specimens.

3. *Leptisolabis usamburana*, Verh., and4. *L. theorie*, Verh.

Verhoeff suggests that the latter is a subspecies of the former, which is very probable. Both are from German East Africa, but it is unsatisfactory to discuss the species without an examination of the type.

Subfamily II. *PARISOLABINÆ* (Verh. Arch. f. Naturg. 1904, p. 119).

Verhoeff separates this subfamily from the *Isolabinae* by the shining frons, which is thus distinct from the rest of the head, without lines, but with the two impressed points. The eyes are only moderately large, separated from the posterior margin of the head by their own diameter; abdomen with a lateral tubercle; second tarsal segment half as long as the third. Forceps of the male remote; tenth abdominal segment truncate at the posterior margin.

Genus V. *PARISOLABIS*, Verh.

This genus is monotypic, the only known species being *Parisolabis nove-zeelandice*, Verh. (*op. cit.* p. 120).

Commander Walker has given me a male from New Zealand which I attributed provisionally to this species, but a glance at Verhoeff's types, on the occasion of a flying visit to the Berlin Museum, showed me that they are "not like

mine, brown, flat, and broad," in the words of my rough notes taken on the occasion. My specimen is black, not very flat, and by no means broad. On carefully comparing it with Verhoeff's characterization of *Parisolabis*, I find that it differs in important particulars, and accordingly am obliged to erect a new genus.

Genus VI. PSEUDISOLABIS, gen. nov.

Corpus minute punctulatum, valde pubescens; pars antica corporis fere cylindrica; abdomen sat depressum: antennæ 15 segmentis, 3 cylindrico, duplo longiori quam latiori; 4 et 5 brevibus, globularibus; cæteris cylindricis, sat brevibus: caput minus triangulare; pronotum sublatius quam longius; mesonotum carinis nullis: pedes graciles; tarsi longi, segmento 2 elongato: abdomen sat depressum, ante apicem subdilatum, tuberculis lateralibus nullis, segmentis apicalibus lateribus convexis; segmento ultimo dorsali transverso, haud angustato, margine postico truncato: forcipis brachia basi remota, basi ipso triquetra, deinde cylindrica, angusta. ♂.

The whole body is finely punctulate and covered with a close yellowish pubescence.

Antennæ with 15 segments, the first long, strongly clavate; second minute, cylindrical; third cylindrical, long, but not so long as the first; fourth minute and globular, not longer than broad; fifth longer than fourth, a little longer than broad; the rest gradually lengthening, but none equalling the third in length, rather thick, cylindrical, but the joints distinctly constricted.

Head not sharply triangular, rectangular posteriorly; the occiput punctulate and pubescent; the frons smooth and tumid; the frontal impressions obsolete. Pronotum subquadrate, the anterior and posterior margins parallel and truncate, slightly broader posteriorly than anteriorly and broader than long, a trifle broader than the head; sides straight, gently diverging posteriorly.

Mesonotum transverse, parallel, with no keels.

Metanotum broader than the mesonotum, the posterior margin gently sinuate.

Prosternum about double as long as broad, parallel.

Mesosternum transverse, posterior margin truncate.

Metasternum transverse, the posterior margin truncate.

Femora rather thick, especially the anterior pair; tibiæ and tarsi slender, second segment of latter rather long and slender, about half as long as the third, the first about as long as the second and third united.

Abdomen rather depressed, gently dilated about the apical

third and very slightly narrower at the apex itself; last dorsal segment short, transverse, truncate posteriorly; penultimate ventral segment obtusely rounded; last ventral segment visible as a pair of triangular lobes just protruding.

Forceps remote at the base, triquetre at the base itself, arcuate, tapering and short, ♂; ♀ unknown.

This genus differs from *Parisolabis* in being much less depressed and less dilated, and the last dorsal segment is by no means narrowed.

It approaches more nearly to *Anisolabis* than does *Parisolabis*, and represents the transition between the Brachylabidæ and the Anisolabidæ.

In the form of the abdomen and last dorsal segment *Pseudisolabis* approaches *Anisolabis*, but the antennæ have fewer segments, the second segment of the tarsi is longer, the posterior margin of the metasternum is scarcely produced between the posterior coxæ, and the mesosternum is shorter, relatively much broader, and truncate posteriorly.

1. *Pseudisolabis walkeri*, sp. n.

Statura mediocri: rufo-niger; femoribus fulvo-nigris, tibiis tarsisque nigris: forcipis brachia basi valde remota, in tertia parte basali triquetra, sat valida, sensim divergentia; dein subito incurva, cylindrica, recta, attenuata. ♂.

		♂.
Long. corporis	11.5 mm.
„ forcipis	2 „

Of medium size; deep reddish black; femora yellowish black, the tibiæ and tarsi darker. Forceps triquetre and gently diverging in the basal third, then rather abruptly bent inwards, straight, cylindrical, tapering, and converging. ♂.

New Zealand, Te Aroha, January 1902.

This interesting specimen was taken by Commander J. J. Walker, R.N., M.A., F.E.S., who kindly gave it to me, and I have the pleasure of dedicating it to him.

XXX.—Descriptions of new African Heterocera.

By GEORGE T. BETHUNE-BAKER, F.L.S., F.Z.S.

MY measurements are taken by doubling the distance from the centre of the thorax to the apex of the wing.

Eupterotidæ.

PARADRALLIA, gen. nov.

Palpi minute, hairy. Neuration: primaries with vein 2 from